Real 5.1 Ch Headphone
Amplifier

ZALMAN
Zalman Tech Co., Ltd.

Thank you for your purchase of Zalman's 5.1Ch Headphone Amplifier.
Read carefully and follow the instructions in your User's Manual for an accurate use.
Keep the warranty certificate for future support.

⊙ **This Headphone Amplifier is compatible with**
  - AV Amplifiers with 【5.1Ch PRE-OUT】
  - Digital decoders with 'analogue-out'
  - Internal 5.1 channel desk-top PC soundcards

⊙ **This Headphone Amplifier shows it's optimum performance with**
  Zalman's suggested Adaptor.

1 **Main Features**

- Compatible with Home Theater Systems (AV Amplifiers)
- Compatible with Home Game Consoles supporting multi-channel audio
- Compatible with 5.1 channel desk-top PC soundcards
- Dual outputs for two users
- Front left/right, Rear left/right and Center/Sub Woofer inputs and outputs
- Independent volume control for each user
- Compatible with Zalman's Real Surround-Sound Headphones
- Sub Woofer channel support for compatibility with Zalman's Real Surround Sound Headphones
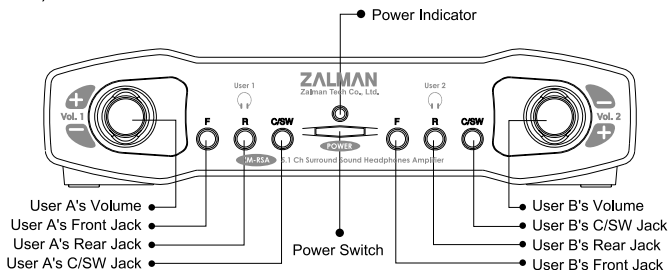
2 **Applications**

- Multi-channel Home Audio and Video Systems
  - Home Theater, HDTV, Portable DVD Player, DVD Car Audio, etc.
  (Use with DSP Decorder or AV Amplifier : Refer to **5** **Compatibility with Various Devices**
- DVD based Home Game Consoles
  - X-Box™, PlayStation®2, Game Cube, etc.
  (Use with DSP Decorder or AV Amplifier : Refer to **5** **Compatibility with Various Devices**
- Desk-top PCs with 5.1 channel audio

3 **This Package Contains**

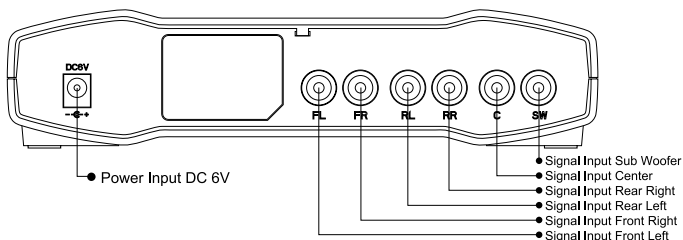- Headphone Amplifier   1
- Vertical Stand (For Headphone Amplifier)   2 (1 Set)
- Power Adaptor   1
- RCA to RCA Cable (To connect AV Amp. and Headphone Amp.)   3
- 3.5mm Stereo to RCA Cable (To connect PC and Headphone Amp.)   3
- User's Manual (Includes Warranty Certificate)   1

4 Parts Description
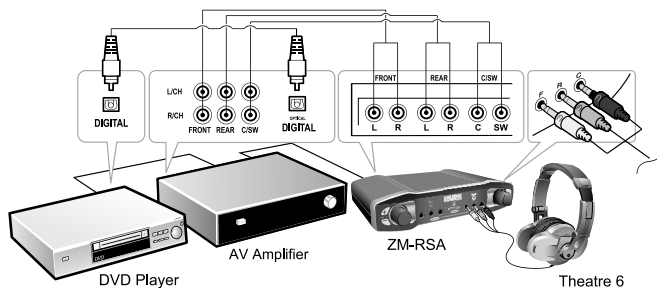
1) Front

- Power Indicator

User A's Volume
User A's Front Jack
User A's Rear Jack
User A's C/SW Jack

Power Switch

User B's Volume
User B's C/SW Jack
User B's Rear Jack
User B's Front Jack

2) Back

DC6V

FL   FR   RL   RR   C   SW

- Power Input DC 6V

- Signal Input Sub Woofer
- Signal Input Center
- Signal Input Rear Right
- Signal Input Rear Left
- Signal Input Front Right
- Signal Input Front Left

5 Connecting with Various Devices

▶ **To connect your Home Theater System**

- In case of using an AV Amplifier

DIGITAL

L/CH
R/CH
FRONT REAR C/SW   DIGITAL

FRONT   REAR   C/SW
L   R   L   R   C   SW

DVD Player   AV Amplifier   ZM-RSA   Theatre 6

※Note :【5.1Ch PRE-OUT】 terminal must be present in the AV Amplifier

● In case of using an AV Receiver

DVD Player
AV Receiver
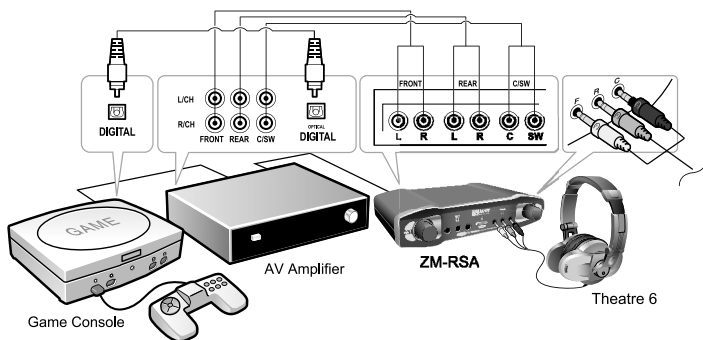ZM-RSA
Theatre 6
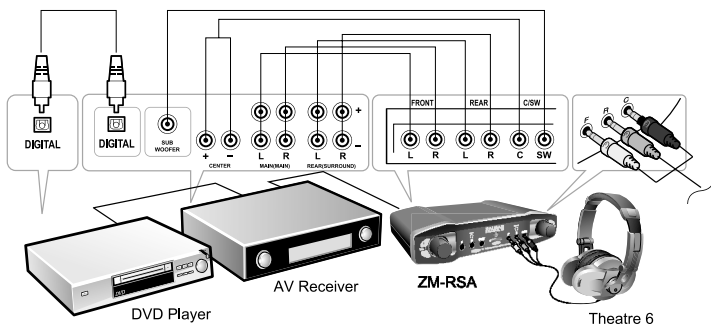
※Note : 【5.1Ch PRE-OUT】 terminal must be present in the AV Receiver

▶ **To connect your Home Game Console supporting Multi-channel Sound**

● In case of using an AV Amplifier

Game Console
AV Amplifier
ZM-RSA
Theatre 6

▶ **To connect your headphones to a PC**

※Each sound card has discrete outputs for Front, Rear and Center/Sub Woofer channels. Therefore, you must identify the location of Front, Rear and Center/Sub Woofer exactly.

Light Gray / Dark Gray / Black

PC
ZM-RSA
Theatre 6
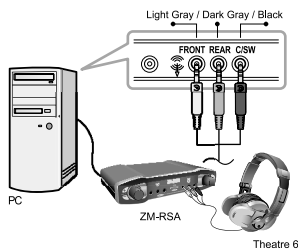
※ Software Configuration on PC

▶ Adjusting Multi-Channel Configuration for PC

1) Click Control Panel
2) Click Sounds and Multimedia Properties
3) Click Audio at Sounds and Multimedia Properties
4) Click Advanced at Sound Playback
5) Click Speakers at Advanced Audio Properties
6) Choose 『**5.1 Surround Sound Speakers**』at Speaker
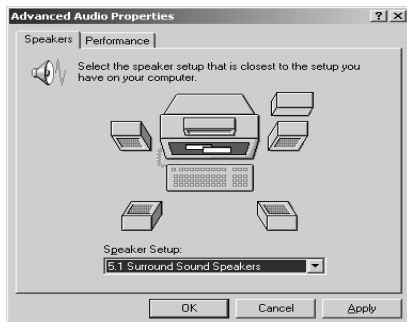

▶ Adjusting Volume Configuration on PC

1) Click Control Panel
2) Click Sounds and Multimedia Properties
3) Click Audio at Sounds and Multimedia Properties
4) Click Volume at Sounds Multimedia Properties
5) Adjust Volume at Play Control
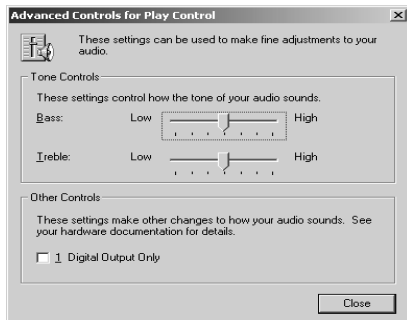
Click Advanced at Play Control if there is no sound, Keep blank '**Digital Output Only**' at Other Control in 'Advanced Controls for Play Control'.

▶**Volume Control for Software DVD Player**

1) Click Configuration at Software DVD Player
2) Click Audio at Configuration
3) Choose 『**6 Speaker**』 Output at Audio Output
4) Choose 『**Advanced Audio Properties**』 if it is**.**
5) Please select 『**Noisy Environment**』
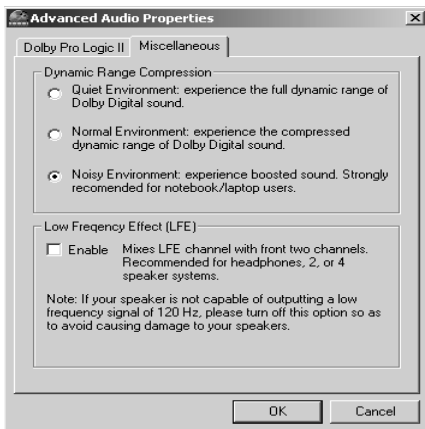
※Recommended DVD Player Software : Power DVD 4.0 or Win DVD 4.0

⊙Switching off the speaker system on your AV Amplifier while using your headphones
- • Set the speaker on-off switch to 'OFF'.
- • If your AV amp may has an **'ALTERNATOR'** for two sets of speakers, please select the other choice of extended speaker system.
- • Please switch off the speaker system of your AV Amp by plugging a dummy headphone jack into the headphone output if your AV amp has one.

6   How to use the Headphone Amplifier

1. Power Switch

- Please press the power switch on the front panel of the headphone amplifier. The LED above the switch should turn on.

2. Volume Control

⚠ **The headphone amplifier will work 10 seconds after power is switched-on. Please reduce the volume to a minimum level before plugging your headphone jacks into the headphone amplifier. High volume levels may damage your hearing.**

⚠ Raising the volume too high will result in distorting the original sound.

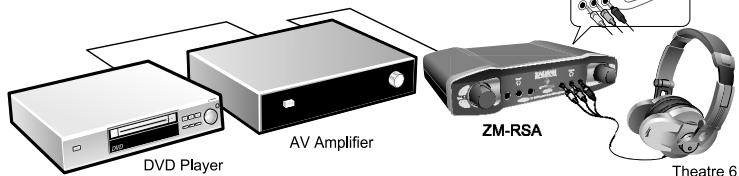• There are two volume controls for two users.

7 **Volume Adjustment**

⚠ **Please reduce the volume level on the amplifier to a minimum before connecting your headphones. High volume levels may damage your hearing**
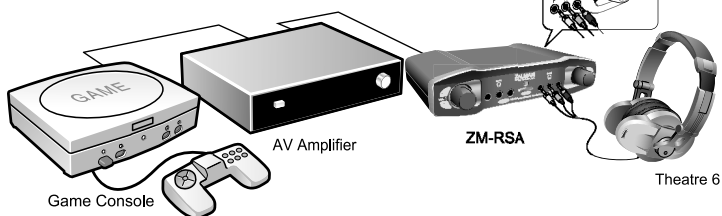
▶ **For Home Theater Systems :**

Adjust the master volume on the AV Amplifier /
Adjust the volume on the Headphone Amplifier

DVD Player

AV Amplifier

ZM-RSA

Theatre 6

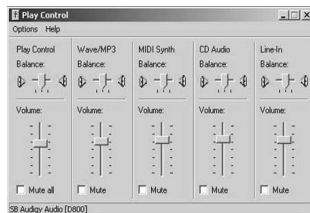▶ **For Game Console:**

Adjust the master volume on the AV Amplifier /
Adjust the volume on the Headphone Amplifier

Game Console

AV Amplifier

ZM-RSA

Theatre 6

▶ **For PC :**

Adjust the volume level in the volume control window of your software before connecting your headphones

PC

ZM-RSA

Theatre 6
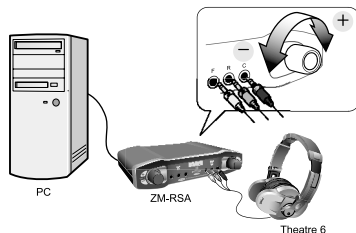
8 Easy Guide

1) When there is no sound signal
- Make sure that the power of the device is connected to be ON.
- Make sure the volume of the connected device is adjusted appropriately.
- Make sure all headphone jacks are correctly connected to the device.
  - Volume control may differ depending on title.
  - Discrete Sound may not be clear if title does not support 5.1 channels.

2) When Sound is distorted or noise is generated
- Make sure that the tone control and volume of the connected device such as an AV amplifier, Game console or PC are appropriately adjusted.
- Make sure that the Front-Center-Rear jacks of the headphone are correctly connected.
- Make sure that your media is not damaged.

9 Safety Notes

Please read section titled "Safety Notes" before using this product.
Please keep this manual for reference.

Regarding marks
The following marks serve to guide the user on proper use of this product and prevent personal injury and/or equipment damage.
Please read sections carefully to ensure proper use and best experience.

⚠ **Warning**
This mark implies that, if someone incorrectly handles the product he/she may be seriously injured or be led to death.

⚠ **Notice**
This mark implies that, if someone incorrectly handles the product he/she may get hurt or the product may be damaged.

⚠ Warning

- If the following accidents occur, please stop using, and please inform a customer service center.
  - Smoke or unusual smell is detected.
  - Water or liquids enter the product.
  - The product is dropped and damaged.
- Please do not disassemble the product by yourself.

⚠ Notice

- Please note that keeping the product near high temperatures or direct heat sources may cause deformation or deterioration of product.
- Should the product become dirty after use, please clean by using a soft gauze with diluted soap and water.
- Do not use benzene or thinner.

Please reduce the volume of your headphone amplifier to a minimum level before plugging in the headphone jacks, and adjust the volume level up to a comfortable level after plugging in the jacks. Please do not increase the volume too much during use of the headphone amplifier. High volume levels may damage your hearing.

10 Specification

- Power : DC 6V-9V
- Power Consumption : 0.6W
- Size : 1. When horizontally laid down : 197(L) X 140(W) X 45(H)
        2. When placed vertically with mounts : 140(L) X 45(W) X 212(H)
- Weight : 12oz/329g (amplifier only)
- Characteristics of Audio
  - Input Condition : Vin -6dBV, f=1kHz
  - Typical Output : 31mW at 32ohm (THD < 0.1%)
  - THD : 0.02% (BW=20Hz-20kHz)
  - Channel Separation : 90dB
  - Output Noise Voltage : -93dBV (BW=20Hz-20kHz)
  - Frequency Response : 20Hz-20kHz

11 Product Warranty

1) Please make sure the warranty certificate is included in the product package.
This product includes a limited warranty certificate. Please fill in a predetermined item on warranty where you purchased this product and keep it at a safe place.

2) Warranty Period
Warranty period is one year from the date of purchase.
You may call for customer service center according to the conditions of the certificate of warranty. Regarding requests for repair, please refer to the certificate of warranty.

3) Repair After Warranty Period
Please contact our customer service center for any repairs after the warranty period has expired.
We will provide repair service upon request of a customer only when it is avaiable at the cost of the customer.

4) Requesting A Repair
Please carefully read the above "Easy Guide" before the request.
When you request a repair to a customer service center,
please provide us with the following information.
- Model No. : ZM-RSA
- Your telephone, address and e-mail :
- Condition of the broken part (in detail) :

12 Source of Manufacture (Zalman)

Zalman Tech Co., Ltd.

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Gumchun-gu, Seoul, Korea
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http://www.zalman.co.kr / e-mail: zalman@zalman.co.kr

Zalman USA, Inc.

1565 Harmony Circle, Anaheim, CA 92807, USA
Tel: +1-714-693-8880 / Fax: +1-714-693-8890
http://www.zalmanusa.com / e-mail: zalman@zalmanusa.com

LIMITED WARRANTY

Zalman Tech Co.,Ltd. warrants this Product (including any accessories) against defects in material or workmanship as follows:

1. LABOR: For a period of 90 days from the date of purchase, if this Product is determined to be defective, Zalman Tech Co., Ltd. will repair or replace the Product, at its option, at no charge, or pay the labor charges to any Zalman Tech Co., Ltd. authorized service facility. After the Warranty Period, you must pay for all labor charges.
2. PARTS: In addition, Zalman Tech Co., Ltd. will supply, at no charge, new or rebuilt replacements in exchange for defective parts for a period of one(1) year. After 90 days from the date of purchase, labor for removal and installation is available from Zalman Tech Co., Ltd. authorized service facilities or a Zalman Tech Co.,Ltd. Custome Service Center at your expense.

To obtain warranty service, you must take the Product, or deliver the Product freight prepaid, in either its original packaging or packaging affording an equal degree of protection, to any authorized Zalman Tech Co., Ltd. service facility.

This warranty does not cover customer instruction, installation, set up adjustments or signal reception problems.

This warranty does not cover cosmetic damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification, or to any part of the Product. This warranty does not cover damage due to improper or maintenance or attempted repair by anyone other than a facility authorized by Zalman Tech Co., Ltd. to service the Product. This warranty does not cover Products sold AS IS or WITH ALL FAULTS.

Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.

This warranty is invalid if the factory applied serial number has been altered or removed from the Product.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. ZALMAN TECH CO.,LTD. SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. In addition, if you enter into a service contract with the Zalman Tech Co., Ltd. Partnership within 90 days of the date of sale, the limitation on how long an implied warranty lasts does not apply to you. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

For your convenience, Zalman Tech Co., Ltd. has established telephone numbers for frequently asked questions:

To locate the servicer or dealer nearest you, or for service assistance or resolution of a service problem, or for product information or operation, call:

Product name	Zalman 5.1 Channel Headphone Amplifier	Agent
Model name	ZM-RSA	Name
Purchase date	month date year Warranty period : 1 year	Tel.
Customer Address	Address Tel. Name	

※ Please fill in the blanks when you purchase this product and keep it at a safe place.